

REMARKS/ARGUMENTS

Claim 1 stands rejected under 35 USC 103(a) over Ishida et al ((US 5,859,746) in view of Takasugi (US 6,351,351). The Applicant respectfully disagrees with this rejection.

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1. *(Previously presented)* *A flex interconnection circuit substrate, comprising:*
 a connector bonding site; an electronic component collection bonding site; at least one MR read-write head bonding site;
 said connector bonding site coupled to said electronic component collection bonding site; and
 said electronic component collection bonding site coupled to said at least one MR read-write head bonding site;
 wherein said electronic component collection includes at least one preamplifier.

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Ishida teaches read-write heads coupling through signal lines to a flexible printed circuit board (13) including the integrated circuit interface. The “flexible printed board (called FPC for simplicity hereinafter) 13 is fixed between a bracket 27 and the actuator 3.” (Fig. 1, col. 4, lines 45 to 47). The patent further states that “The read/write-signal lines 14 from the read/write head 8 and the servo-signal lines 15 from the servo head 9 are soldered to a R/W pad 16 and a servo pad 17, respectively, which are formed on a FPC board 13.” (col. 5 lines 29-32). There is no MR read-write head bonding site, instead there is a collection of signal lines, not flex circuitry, actually coupling the read-write head(s).

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Takasugi uses three separate circuit components to interconnect the read-write heads with the preamplifier, thus three separate substrates, where this Claim point to exactly one to achieve a similar result. Consider Figures 1 and 2, “Fig. 2 is a perspective view illustrating the wiring integrated suspension 1 with the relay FPC [Flex Printed Circuit] 30 removed therefrom.” (Col. 7, lines 17-19). “As illustrated in Fig. 1, the wiring integrated suspension 1 includes a wiring integrated flexure 10 that, in turn, includes ... with a distal end portion of the flexure wiring structure adapted

to being connected to the said magnetic head slider ... and a proximal end portion being adapted for being connected to a printed wiring board with a preamplifier IC mounted on thereon.” (Col. 6 line 65 to Col. 7 line 10). The relay FPC 30 is further shown in Fig. 6, confirming the quoted description, neither including the MR read-write head bonding site, nor the connector bonding site coupling to the electronic component collection bonding site.

The Applicant finds the use of the single flex interconnection circuit bonding the read-write heads all the way to the preamplifier and component collection is not disclosed nor suggested in the cited prior art, whether taken individually or collectively. The Applicant requests that the Examiner remove the rejection of this Claim and place it in condition for allowance.

Claims 2 to 6 are dependent upon Claim 1. The Applicant finds the use of the single flex interconnection circuit is not disclosed nor suggested in the cited prior art, whether taken individually or collectively. The Applicant requests that the Examiner remove the rejection of these 15 Claims, and place them in condition for allowance.

If there are further issues the Examiner wishes to discuss, please contact either Earle Jennings or Gregory Smith at (510) 742-7417.

20 Very respectfully submitted,

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